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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/023,148	12/13/2001	David Michael Matela	16258	3181

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KIMBERLY-CLARK WORLDWIDE, INC.
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NEENAH, WI 54956

EXAMINER	
SALVATORE, LYNDA	

ART UNIT	PAPER NUMBER
1771	

DATE MAILED: 02/09/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/023,148	MATELA ET AL.	
	Examiner	Art Unit	
	Lynda M. Salvatore	1771	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *19 January 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1,6-20 and 41-54* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1,6-20 and 41-54* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Response to Amendment

1. Applicant's request for continuing examination (RCE), amendment and accompanying remarks filed 01/19/06 have been fully considered and entered. Claims 2-5 have been canceled and claims 1, 47 and 51 have been amended as requested. Applicant's amendments are not found patently distinguishable over the prior art made of record and Applicant's arguments are not found persuasive of patentability for reasons set forth herein below.

Claim Rejections - 35 USC § 103

2. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

3. Claims 1-6,12-18,20, and 41-50 stand rejected under 35 U.S.C. 103(a) as being unpatentable over of Jackson et al., US 5,952,251 in view Everett et al., US 6,437,214 for reasons set forth in the last Office Actions dated 07/25/04, 02/01/05 and 09/12/05.

Applicant amended claims 1 and 47 to recite the limitation of "absorbent" with respect to the fibers and particles and also "wherein the multi-component thermoplastic filaments comprise about 5% to about 30% by weight of the non-woven web and the absorbent material comprise about 70 to about 95% by weight of the non-woven web". Applicant argues that the primary reference of Jackson et al., fails to set forth the newly added material percentages and the secondary reference of Everett et al., teach substantially homogenously mixing the absorbent material with the hydrophilic fibers prior to the formation of the coform web rather than substantially uniformly dispersing the absorbent material in the thermoplastic material as instantly claimed. These arguments are not found persuasive.

With regard to Applicant's argument that the secondary reference of Everett et al., only teach homogenously mixing the absorbent material with the hydrophilic fibers rather than uniformly dispersing the absorbent material with the thermoplastic material, it is respectfully pointed out that the hydrophilic material taught by Everett et al., encompasses a thermoplastic material. Specifically, Everett et al., teach that the suitable hydrophilic fibrous material can be synthetic fibers made from inherently wettable or non-wettable thermoplastic polymers such as polyester or polypropylene respectively. Presently, Applicant has not limited the thermoplastic material to exclude wettable or non-wettable thermoplastic polymers. Absent such limitations, it is the position of the Examiner that the secondary reference of Everett et al., sufficiently evidences uniformly dispersing the absorbent with the thermoplastic material. Recall, Everett et al., teach an absorbent core structure of a fibrous coform material comprising a blend of superabsorbent materials and synthetic hydrophilic fibers made from inherently wettable or non-wettable thermoplastic polymers (Column 13, 50-60 and Column 14, 30-35). Everett et al., specifically teach that the superabsorbent materials may be substantially homogenously mixed with the hydrophilic fibers (Column 14, 35-40).

With regard to the z-direction limitations, the secondary reference of Everett et al., teach providing a coform with a non-step-wise gradient through a substantial portion of the thickness (z-direction) (column 14, 35-59).

With regard to Applicant's newly added absorbent and thermoplastic material percentage limitations, the primary reference of Jackson et al., teach a mixture comprising 30% to 35%, continuous fibers, 5% to 8%staple fiber, and from 40% to 60% of absorbent material (Claims 18 and 19). However, it is the position of the Examiner that it would be obvious to one having

ordinary skill in the art at the time the invention was made to optimize the ratio of absorbent and thermoplastic material to achieve a desirable balance of absorbency and reinforcing properties. It has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine sill in the art. *In re Aller*, 105 USPQ 233

To reiterate, the patent issued to Jackson et al., discloses a water dispersible fibrous web comprising melt-spun continuous fibers, staple reinforcing polymer fibers, and an absorbent material (Column 45, 30-35, and Column 8, 55-60). Jackson et al., defines a coform web as continuous melt-spun reinforcing fibers intermixed with shorter absorbent fibers such as pulp and super-absorbents (Column 8, 10-15). The continuous fibers may be formed from various polymers such as polyesters, polyethylene terephthalate, polyamides, and a blend of at least two these materials (Column 9, 28-35). The staple fibers may be formed from the same polymers as listed above as well as nylons and polyurethanes (Column 9, 59-68). The absorbent material may consist of wood pulp fibers and super-absorbent materials in the form of particles, fibers or flakes (Column 10, 41-45,56-67). The amount of continuous fibers ranges from 30% to 35%, the staple fiber concentration ranges from 5% to 8%, and the amount of absorbent material ranges from 40% to 60% (Claims 18 and 19). Jackson et al., teaches in example 1 a non-woven comprising 50% continuous fibers and 50% of staple reinforcing polymer/pulp fibers wherein 80% is pulp and 20% is polymer (Column 18,55-65). Jackson et al., teaches that coform non-woven webs are well suited for personal absorbent care articles (Column 11, 20-30).

Jackson et al., fails to teach dispersing the secondary superabsorbent materials uniformly, however, the patent issued to Everett et al., teach an absorbent core structure comprising a

fibrous coform material comprising a blend of superabsorbent materials and synthetic hyrdrophillic fibers made from inherently wettable thermoplastic polymers (Column 13, 50-60 and Column 14, 30-35). Everett et al., specifically teach that the superabsorbent materials may be substantially homogenously mixed with the hydrophilic fibers (Column 14, 35-40).

Therefore, motivated by the desire to provide consistent absorbency throughout the absorbent core, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the coform taught by Jackson et al., by homogeneously dispersing the secondary material with the hydrophilic thermoplastic fibers as taught by Everett et al.

4. Claims 1,6-8,12,14, 20 and 41-54 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Neely et al., PCT WO 00/66824 in view Everett et al., US 6,437,214 for reasons set forth in the last Office Actions dated 07/25/04, 02/01/05 and 09/12/05.

Applicant amended claims 1, 47 and 54 to recite the limitation of "absorbent" with respect to the fibers and particles and also "wherein the multi-component thermoplastic filaments comprise about 5% to about 30% by weight of the non-woven web and the absorbent material comprise about 70 to about 95% by weight of the non-woven web".

The above arguments made in section 3 over the primary reference of Jackson et al., above are equally applicable to the combination of Neely et al., in view of Everett et al. Applicant has not set forth any specific new arguments for which to consider.

Recall, the published PCT application to Neely et al., teach a non-woven comprising continuous fibers oriented in a z-direction (Abstract). Neely et al., teach enhancing the absorbency of the non-woven web with an absorbent such as super-absorbent particles as a coform (Page 8,1-3). The continuous fibers are bicomponent fibers made from various

polyolefins, polycarbonates, polystyrenes, thermoplastic elastomers, fluoropolymers, and vinyl polymers (Page 7,6-31).

Neely et al., fails to teach dispersing the secondary superabsorbent materials uniformly, however, the patent issued to Everett et al., teaches an absorbent core structure comprising a fibrous coform material comprising a blend of superabsorbent materials and synthetic hyrdrophillic fibers made from inherently wettable thermoplastic polymers (Column 13, 50-60 and Column 14, 30-35). Everett et al., specifically teaches that the superabsorbent materials may be substantially homogenously mixed with the hydrophilic fibers (Column 14, 35-40).

With regard to Applicant's newly added absorbent and thermoplastic material percentage limitations, the primary reference of Neely et al., fail to teach the claimed ratio percentages of absorbent and thermoplastic material. However, it would have been obvious to one having ordinary skill in the art at the time the invention was made to optimize the ratio of absorbent and thermoplastic material to achieve a desirable balance of absorbency and reinforcing properties. It has been held that discovering the optimum of a value of a result effective variable involves only routine skill in the art. *In re Boesch*, 617 F. 2 272, 205 USPQ 215 (CCPA 1980)

Therefore, motivated by the desire to provide consistent absorbency throughout the absorbent core, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the coform taught by Neely et al., by homogeneously dispersing the secondary material as taught by Everett et al.

5. Claims 10 and 11 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Jackson et al., US 5,952,251 and/or Neely et al., PCT WO 00/66824 in view of Everett et al., US

6,437,214, as applied to claim 1 above, and further in view of Fontenot et al., PCT WO 00/34567 for reasons set forth in the last Office Actions dated 07/25/04, 02/01/05 and 09/12/05.

The rejection of claim 1 from which claims 10 and 11 depend is maintained and Applicant has not presented any new arguments for which to consider.

Recall, the combination of prior art fails to teach the instantly claimed density range, however the published PCT application to Fontenot et al., teach an absorbent airlaid composite comprising bicomponent and pulp fibers (Abstract). Fontenot et al., teaches a density of about .02 to .05 g/cc (Page 10,19-21).

Therefore, motivated to provide a thin dense absorbent structure it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the coform non-woven webs of Jackson et al., and Neely et al., having the density range taught by Fontenot et al.

6. Claims 9 and 19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Neely et al., PCT WO 00/66824 in view of Everett et al., US 6,437,214, as applied to claims 1 and 8 above, and further in view of NIPPON ESTER CO LTD, JP 2001181932 A for reasons set forth in the last Office Actions dated 07/25/04, 02/01/05 and 09/12/05.

The rejection of claims 1 and 8 from which claims 9 and 19 depend are maintained. Applicant has not presented any new arguments for which to consider.

Recall, Neely et al., fails to specifically teach a multi-component fiber having a side-by-side (A/B/A) striped configuration, however, such multi-component fiber arrangements are known in the art. For example the Japanese abstract teaches a stripped side-by-side multi-

component fiber (Abstract and Figures). The Japanese abstract teaches that the fibers are suitable for textile use and exhibit soft feeling and drape.

Therefore, motivated by the desire to produce a coform material having a soft feeling and/or drape, it would have been obvious to one having ordinary skill in the art at the time the invention was made to form the multi-component fibers taught by Neely et al., having the side-by-side striped configuration disclosed by NIPPON ESTER CO LTD.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Lynda M. Salvatore whose telephone number is 571-272-1482. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Terrel Morris can be reached on 571-272-1478. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

February 06th, 2006
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